

REMARKS/ARGUMENTS

The specification has been amended to make editorial changes to place the application in condition for allowance at the time of the next Official Action.

A proposed drawing correction is submitted for Figure 2 to address the drawing objection noted in the Official Action.

Page 5, line 29 of the specification recites that feed screw device 70 is shown in Figures 2 and 3 and lines 31 and 32 disclose that the feed screw is provided vertically relative to the projector main body 12 shown in Figure 1. Accordingly, the projector main body 12 is shown in Figure 1 and the feed screw 72 is shown as part of the feed screw device 70 in Figures 2 and 3. Based on the above remarks and proposed drawing correction for Figure 2, Applicant believes that the drawing objections are addressed.

Claims 1-8 were previously pending in the application. Claims 1-8 are cancelled and replaced with new claims 9-18. The new claims are believed to address the 35 USC §112, second paragraph rejection noted in the Official Action.

Claims 1-8 are rejected as unpatentable over PARK 5,537,169.

Reconsideration and withdrawal of the rejection are respectfully requested because the reference does not disclose or suggest resilient members for cushioning first and second shaft

bushes against a fixed support as recited in new claim 9 of the present application.

By way of example, Figure 3 of the present application shows fixed supports 98, 100. Supports 98, 100 house shaft bushes 94 and 96, respectively. Resilient members, 76, 78 cushion the first and second shaft bushes 94, 96 against fixed support 98, 100.

As noted in the Official Action, PARK teaches lead and rear parts 55 and 56 respectively of the feed screw. These parts are pitched to effect the moving velocity of guide plates 40 and 44. The Official Action has indicated that the pitched parts of the feed screw in conjunction with guide rods 36' and the guide plates 40 and 41 function equivalently to cushioning members.

However, neither the lead and rear parts 55 and 56 nor the guide rods 36' or any other part of PARK is a resilient member for cushioning the first and second shaft bushes against a fixed support. In addition, the Examiner is respectfully requested to indicate which parts of PARK are stationary parts.

As the reference neither teaches resilient members nor a fixed support, Applicant believes that the reference could not teach or suggest resilient members for cushioning first and second shaft bushes against a fixed support as recited in claim 9.

Claims 10-16 depend from claim 9 and further define the invention and are also believed patentable over the cited prior art.

In addition, claim 10 recites that the first and second shaft bushes each comprise a flange. See flanges 95, 97 in Figure 3. Claim 11 recites that the resilient members are springs and the springs urge the flange against the fixed support. Claim 12 recites that the feed screw moves a projection lens barrel. The device of PARK moves a projection lens holder which contains a barrel but does not move the barrel itself.

Claim 13 recites a nut threaded on the feed screw to move a movable member. Claim 14 recites a detecting device which detects a movement of a feed screw in the axial direction.

Figure 5 of the present application shows switches 110, 112 which detect axial movement of the feed screw 72. The Official Action has indicated column 5, lines 56-59 of PARK as teaching a detecting device. However, this passage refers to a control switch and a panel. There is no teaching or suggestion that either the control switch or the panel detects movement of the feed screw in the axial direction.

Claim 15 recites a gear fixed to the feed screw and wherein the motor comprises an output shaft having a pinion gear at one end. The pinion gear drives the gear to rotate the feed screw. Claim 16 recites that the feed screw is only movable in

rotation wherein the feed screw is in a first position and is movable both axially and in rotation when the feed screw is in a second position. As disclosed on page 7, lines 2-27 of the present application, the feed screw 72 is normally rotated (in a first position) until the guide part 84 comes into contact with a stopper 88. The motor continues to rotate (as does the feed screw). However in this second position, the feed screw also moves axially against the urging force of the spring to soften the impact at the end of the moving stroke.

None of these features are disclosed in the references and thus these claims are believed patentable regardless of the patentability of the claims from which they depend.

New claim 17 is written in 35 USC §112, sixth paragraph means-plus-function format. Accordingly, any applied prior art must teach identical or equivalent structure that performs the exact recited function of absorbing an inertia force transmitted to the feed screw when the movable member contacts a stopper at an end of the moving stroke, as disclosed on page 7, lines 2-31 of the present application.

Claim 18 is also written in 35 §112, sixth paragraph means-plus-function format. Accordingly, any applied prior art must disclose or suggest the identical or equivalent structure performing the exact function of moving a feed screw only in rotation when the feed screw is in a first position and moving

the feed screw both axially and in rotation when the feed screw is in a second position as disclosed on page 5, line 30 through page 8, line 29 of the present application.

By way of further explanation, the object of the present application is to provide a feed screw device that softens the impact at a drive end. This object is achieved by the feed screw device as recited in claims 9-18 of the present application.

PARK is interested in coordinating the movement of three projection lens holders so that their images coincide simultaneously and accurately on a screen. PARK does not contemplate softening the impact at a drive end of a feed screw. Therefore, PARK could not teach or suggest what is recited in claims 9-18.

Accordingly, it is believed that the new claims avoid the rejection under §103 and are allowable over the art of record.

In view of the present amendment and the foregoing remarks, it is believed that the present application has been placed in condition for allowance. Reconsideration and allowance are respectfully requested.

The Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any

overpayment to Deposit Account No. 25-0120 for any additional  
fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17.

Respectfully submitted,

YOUNG & THOMPSON



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